

ABSTRACT OF THE DISCLOSURE

An apparatus and method for partitioning a three-dimensional graphical environment for displaying representative images of objects in a database dependent on the database of objects and their associated metadata is described. According to the apparatus and method, the database of objects is represented by a hierarchical tree derived from the object metadata. The tree includes parent nodes, their associated child nodes, and data object nodes, where every node has an associated weight. A predetermined parent node is pre-assigned an area corresponding to the undivided graphical environment. Then, for each parent node having at least two associated child nodes in the tree, the area is recursively divided into a plurality of areas corresponding to each of the associated child nodes such that the areas are proportional to the child node weights.